Province of
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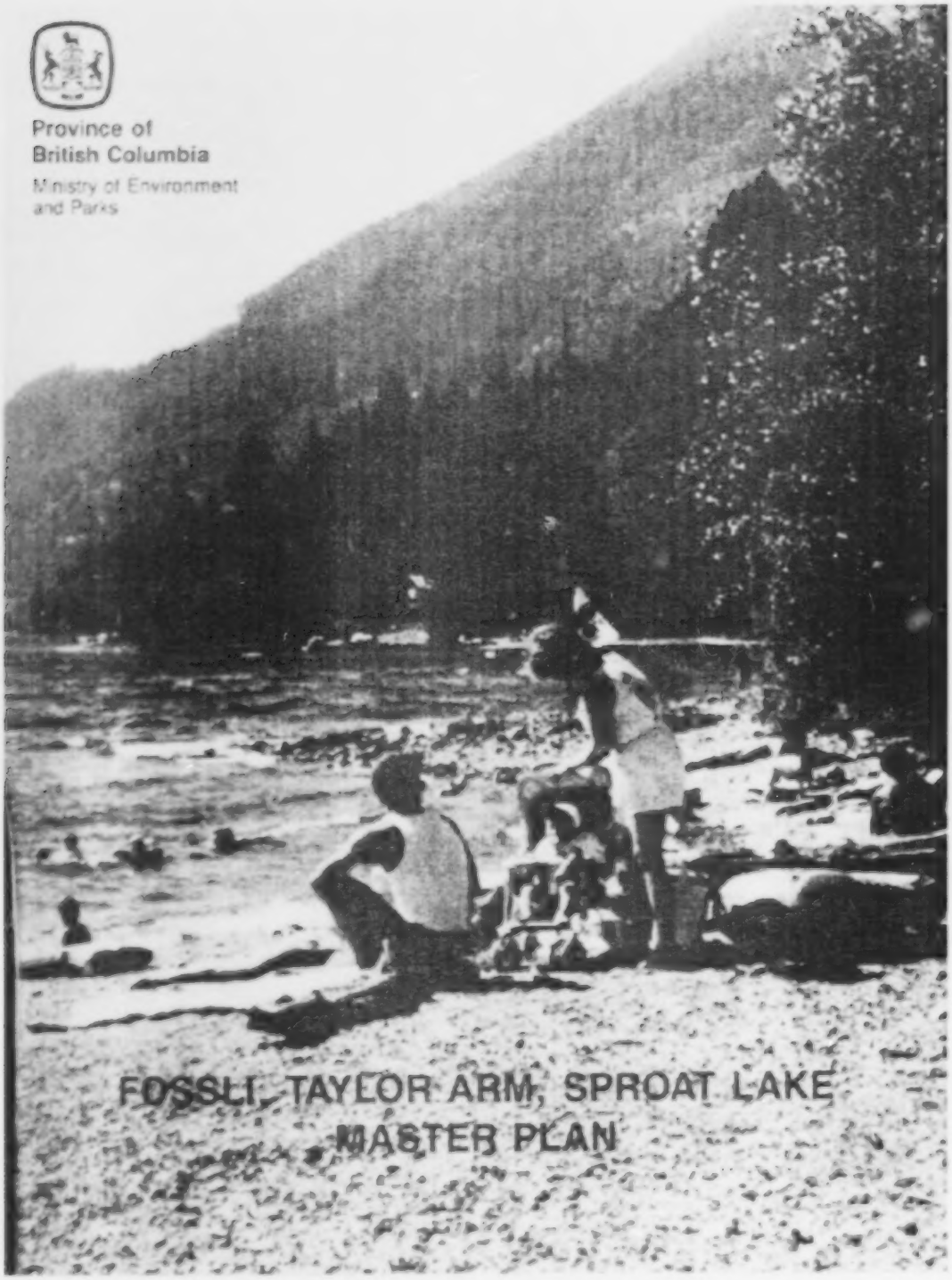
Ministry of Environment
and Parks



FOSSLI, TAYLOR ARM, SPROAT LAKE MASTER PLAN

Mr. George Trachuk
Regional Director
South Coast Region

This Master Plan for Fossli, Taylor Arm and Sproat Lake Parks is submitted for your consideration and approval.

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RECOMMENDED: _____ DATE: May 19/89
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FOSSLI, TAYLOR ARM, SPROAT LAKE

MASTER PLAN

December, 1988

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FOSSLI, TAYLOR ARM, SPROAT LAKE

MASTER PLAN

1.0 PLAN HIGHLIGHTS

The three parks included in this master plan are all located on the Sproat Lake shoreline and have similar resources, issues and management needs. They were established to provide lake oriented recreational opportunities. Despite the low level of development, two of these park areas are heavily used by local residents and tourists. The third area, Fossli Park, while less accessible and not as well known, has resources that are as significant as those found in the other two parks.

There are two main issues addressed in this plan: the type and levels of use and facilities appropriate for each park and the problems and impact associated with high use levels in Sproat Lake Park.

The purpose of this master plan is to establish a set of management guidelines and direction statements. Specifically, the major recommendations of the plan are as follows:

i) to acquire additional park land adjoining Sproat Lake Park to increase the quantity and diversity of recreational opportunities.

ii) expand camping and day use facilities at Sproat Lake.

iii) develop day use facilities at Taylor Arm and Fossli Parks.

2.0 INTRODUCTION

2.1 Plan Purpose

The purpose of this master plan is to guide the development of expanded day use and camping opportunities and the management of Fossli, Taylor Arm and Sproat Lake Parks. All three parks have the same major issues to be addressed.

2.2 Background Summary

There is very little resource diversity in all three park areas due to their small size. The main recreational feature for each is Sproat Lake and the beaches. They provide a number of swimming, boating and picnicking opportunities, while also acting as the main visual focus. Petroglyphs at Sproat Lake Park provide an added attraction for visitors by adding a historic flavour.

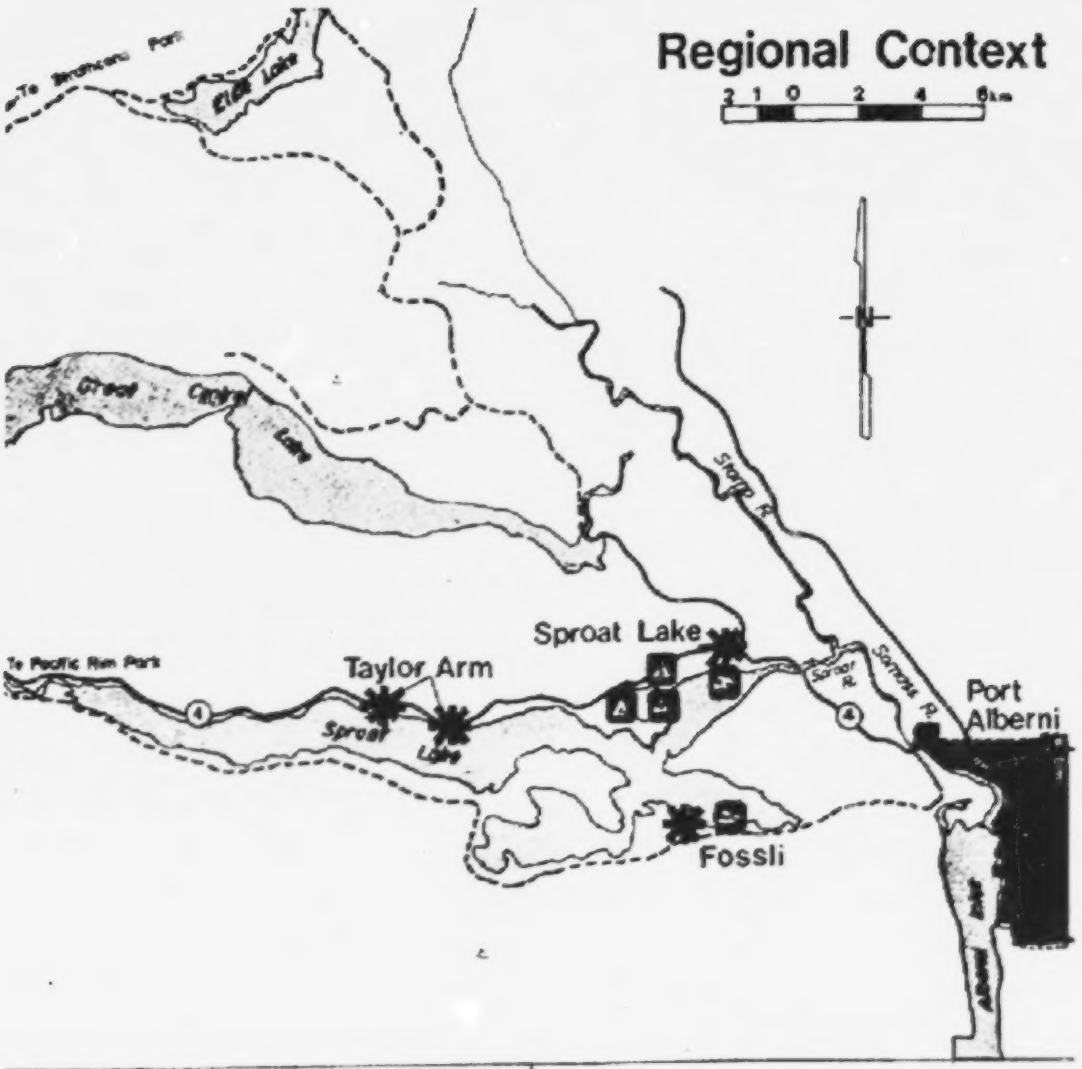
Sproat Lake is the most extensively developed and used of the three parks. Taylor Arm and Fossli Parks have very little development but are well used and have the potential to provide many more recreational opportunities given appropriate facility development.

3.0 THE ROLE OF THE PARK

3.1 Regional/Provincial Context

The three park areas are situated in the central interior of Vancouver Island, approximately 15 kilometres west of Port Alberni. With a current population of about 18,200, Port Alberni is the third largest community on Vancouver Island. Although population levels have declined about 9% over the past 15 years, the community continues to experience a small but steady annual economic growth rate of 3% to 5%. Like many communities in the province supported primarily by the forest industry, Port Alberni is striving to diversify its economic base by encouraging the development and promotion of local tourism. Building on a reputation as a world renowned destination for salmon fishing, most of the tourism opportunities are marine oriented, such as fishing charters and whale watching.

The federal and provincial park agencies are the main suppliers in the region for land-based tourism and recreation. Pacific Rim National Park and Strathcona Provincial Park are the largest and most significant areas in terms of the variety of natural resources and recreational opportunities on Vancouver Island; however, at the local level, the three provincial park areas on Sproat Lake are an integral part of a tourism/recreation destination that include a variety of private and public facilities and services from campgrounds and marinas to golf courses and sawmill tours.



Legend

- Paved Road
- Main Logging Road
- Provincial Park
- Boat Launch
- Private Campground

3.2 Conservation Role

The natural resources of the parks contribute very little toward landscape representation of the Vancouver Island Mountains Regional Landscape. There are other areas on the island, such as Strathcona and Schoen Lake Parks that when combined, provide a satisfactory representation of this landscape.

In view of the extensive resource development in the region and the lack of protected natural areas, the three park areas have a conservation role in protecting natural areas of regional significance.

Sproat Lake Park has an additional conservation role of protecting the Indian petroglyphs and presenting them to the public.

3.3 Recreation Role

Sproat Lake - The recreation role of Sproat Lake is to provide a variety of day use and camping opportunities that address the needs for regional, destination, and travel corridor recreation opportunities that enhance local tourism.

Taylor Arm - The recreation role of Taylor Arm is to provide group camping and a variety of day use opportunities to clubs, school groups and community associations at Bookhout Creek to address the needs for group regional recreation. The recreation role at Friesen Creek is to provide a variety of day use opportunities to serve the needs for regional, and travel corridor, recreation.

IMAGE NOT AVAILABLE

Fossli Park - The recreation role of Fossli Park is to provide a variety of boat-in day use opportunities that address the needs of residents for regional recreation.

4.0 ZONING (Figure 2)

Zoning is a procedure used to assist the planning and management of *Park Act* designations by dividing each park or recreation area into logical land and water units based upon uniform and consistent management objectives. The zones reflect the intended land use, the level of management and development required and thus the level of human activity to be accommodated. In some cases it is practical to be more specific about the nature of the zone. This can be accomplished with the use of subzones. The subzones are more explicit in terms of area, objectives and management guidelines than are zones.

In this master plan two zones; Intensive Recreation and Natural Environment, and two subzones; Special Features and Development have been designated.

Intensive Recreation Zone

The objective of this zone is to provide for a variety of readily accessible facility oriented outdoor recreation opportunities in areas where use levels are high and the site is intensively developed. Natural resource features of the park are retained primarily in a natural state. Park management emphasizes maintaining a high quality recreation experience. This zone applies to all of Sproat Lake Park except for the petroglyph area and to the Friesen Creek delta of Taylor Arm Park. At Sproat Lake Park, there is very little area that is not developed; consequently, most of the park with the exception of the petroglyphs, is designated as an intensive recreation zone.

Natural Environment Zone

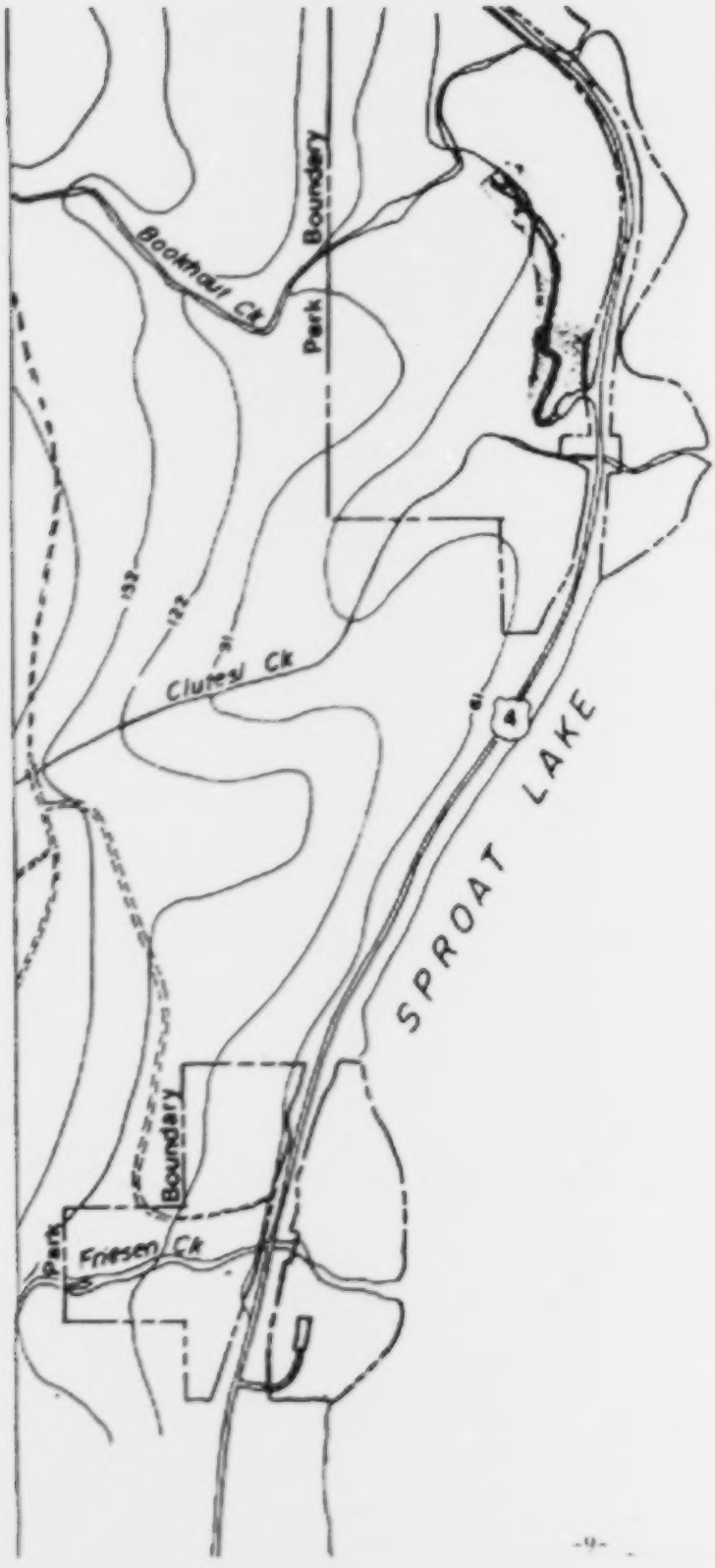
The objective of this zone is to provide for a variety of easily accessible off-road outdoor recreation opportunities, such as trails or walk-in campsites in a largely undisturbed natural environment. Use levels in this zone are relatively low and facilities visually compatible with the natural setting. The park management emphasis is on maintaining the natural environment while providing recreational opportunities. All of Fossli Park and the majority of Taylor Arm Park are included in this zone. The walk-in boat-in nature of Fossli Park and the natural setting of park resources dictates low use levels and low levels of development. Although the Clutesi Creek day use area at Taylor Arm Park is occasionally subject to intensive use levels, it is essentially a low use, low development natural environment zone.

Development Subzone

The objective of the development subzone is to provide for concentrations of high use visitor services and facilities. The development subzone is a small specific area of occurrence. The group campsite at Taylor Arm Park and the Friesen Creek day use area are small areas of concentrated use surrounded by a natural setting. Management is the same as for the intensive recreation zone, emphasizing maintaining the quality of the recreational opportunities.

Special Features Subzone

This subzone is used for areas of a park that have significant natural or human heritage resources or features which should be preserved and presented to the public. The Indian petroglyphs at Sproat Lake Park fall into this category. A high level of management protection with on-going monitoring and low impact interpretative information is emphasized.



Taylor Arm Park

0 100 200 300 400 m

Zoning

Development Subzone

Natural Environment Zone

FIGURE 2

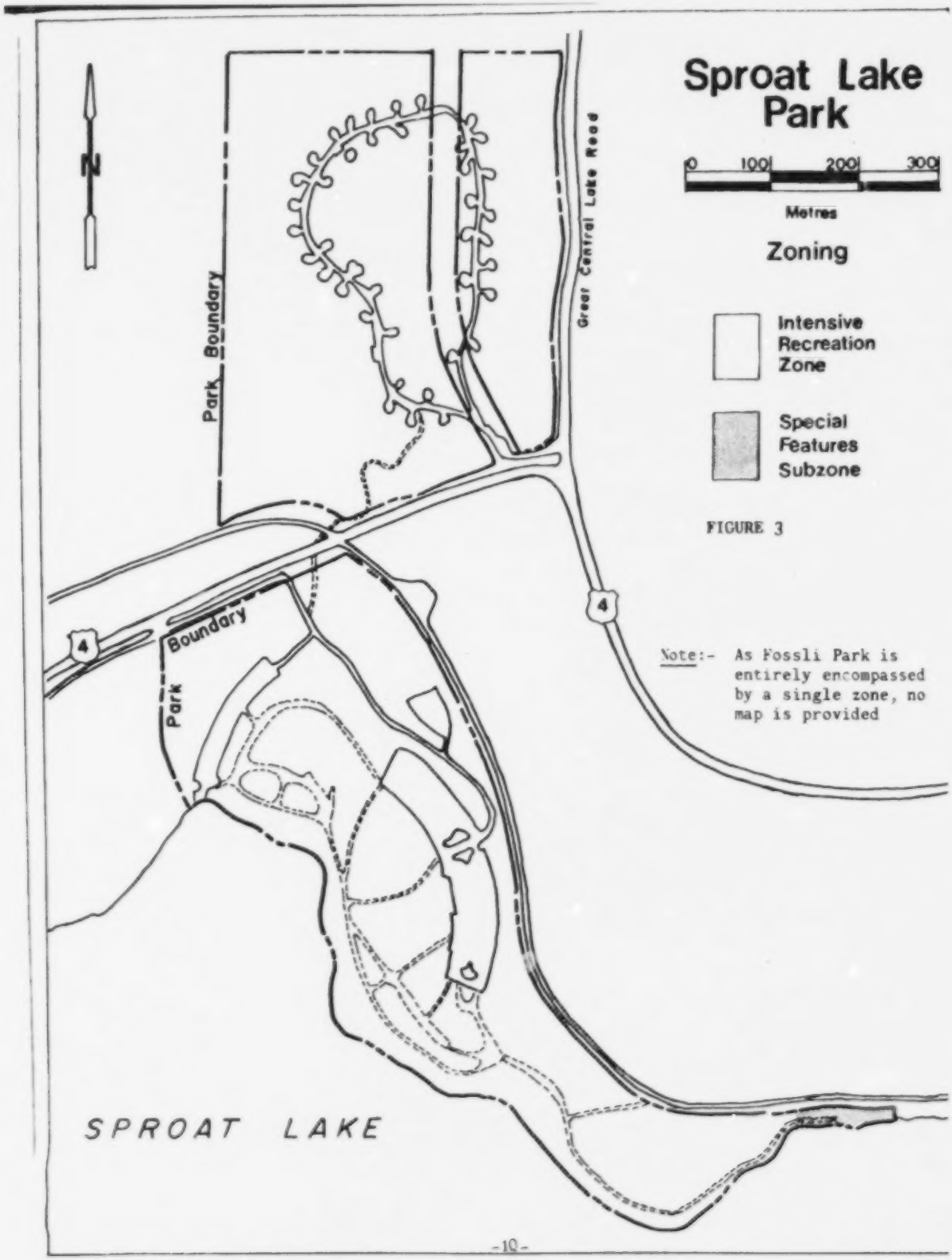


FIGURE 3

Note:- As Fossli Park is entirely encompassed by a single zone, no map is provided

5.0 NATURAL AND CULTURAL RESOURCES MANAGEMENT

5.1 Introduction

The overall management of resources will be based upon the *Park Act*, park regulations and ministry and division policies and the role of each park in the overall system of provincial parks and recreation areas.

The resource management objective is to ensure that the Ministry of Parks goals are met by:

- protecting the natural and cultural resources of the park;
- providing only minimum levels of development appropriate to the existing levels of recreational use;
- monitoring use impacts and resource conditions so that appropriate actions may be taken;
- establishing resource guidelines that will protect the park's recreation and conservation resources.

5.2 Management Objectives/Actions/Policies

5.2.1 - Land Management/Boundaries

An addition is required to the land base of Sproat Lake Park to expand day use and camping opportunities and to increase the amount of natural area in response to a growing demand.

Objective : To acquire approximately 91 hectares of upland and lakeshore property adjacent to Sproat Lake Park.

Action : Initiate a land exchange between the owners, MacMillan Bloedel Limited and the Crown.

5.2.2 - Water Management

As Sproat Lake is the main water source for park visitors and residents in the area, protecting the water quality is essential.

Objectives : To minimize the impact of park uses on water quality and to ensure water supplied in the park meets safety and health standards.

Actions : Water provided in the park will be monitored and tested periodically to ensure potable standards.

: Sanitary facilities shall meet Ministry of Health standards to ensure no contamination of ground water.

: The public will be encouraged to practice conscientious use of water for domestic as well as recreational purposes.

5.2.3 - Vegetation Management

The main requirement is the development of a strategy to deal with a root rot problem in the Sproat Lake Park campground.

Objective : To ensure an adequate and diverse forest cover is maintained throughout the parks.

Action : Where it is necessary to remove significant numbers of trees as a result of root rot, storm damage or similar hazards, replacement trees of a resistant species will be planted and maintained.

5.2.4 - Fish and Wildlife Management

Although the significant fish and wildlife resources associated with the park are largely outside its boundaries, they substantially contribute to the enjoyment of the park.

Objective : To ensure that the existing levels of fish and wildlife associated with the parks are maintained.

Action : Monitor the management of these resources by other agencies and provide comment and recommendations on impacts.

5.2.5 - Visual Resources Management

The substantial private developments near park boundaries and the close proximity of the highway in most cases require visual management that ensures adequate buffering and screening of these views. In addition, there are several areas of visual enhancement required at Taylor Arm and Sproat Lake Parks.

Objective : To maintain visual screening of the highway and adjacent private developments while improving and creating new visual opportunities.

Actions : Rehabilitate the gravel pit at Taylor Arm Park and remove some shoreline vegetation to enhance visual access to the lake and allow more sunshine into the site.

: Slope erosion in the background of the Sproat Lake Park petroglyph requires treatment.

5.2.6 - Cultural Resources Management

The Indian petroglyphs are interesting cultural features that provide a special attraction to visitors and enhance their understanding and enjoyment of the park.

Objective : To protect the Indian petroglyphs and provide information on their significance.

Actions : The petroglyphs will be maintained free of any obstructions including moss growth using nondestructive methods.

: Protective fencing to control visitor access will be upgraded and maintained in conjunction with revegetation of native species to control erosion.

: A new interpretive sign will be provided.

6.0 VISITOR SERVICES

6.1 Introduction

The general concept for providing improved visitor services is based upon the current levels of park use and awareness of park values. Although all three park areas have similar resources, their access, use and value by the public varies. Generally the visitor services objective for all three areas is to enhance existing recreation with visitor services that foster greater opportunity, convenience and enjoyment of park resources.

For Fossli Park, boat access and destination day use opportunities and facilities will continue. Low use levels are expected to continue; however, a small degree of facility improvement would enhance existing use and encourage others to visit.

At Taylor Arm Park, the Friesen Creek site will emphasize destination and travel corridor day use. The superior highway access, high use and favourable terrain make this site suitable for intensive day use recreation. Commercial visitor's services in the form of recreational equipment rental will be considered.

Bookhout Creek will continue with group camping; however, Clutesi Creek will focus on providing day use visitor services to those using the group camp and to function as a day use overflow site for Friesen Creek and Sproat Lake Park.

Although Sproat Lake Park offers a wide range of recreational opportunities and has high use levels and extensively developed visitor services, there are significantly more opportunities available in the park and surrounding areas that could assist in relieving use pressures. The visitor services concept for Sproat Lake Park is to increase the quantity of existing intensively used opportunities and services while expanding the diversity of opportunities through the acquisition of additional natural features. The existing access will continue and the quality of roads improved.

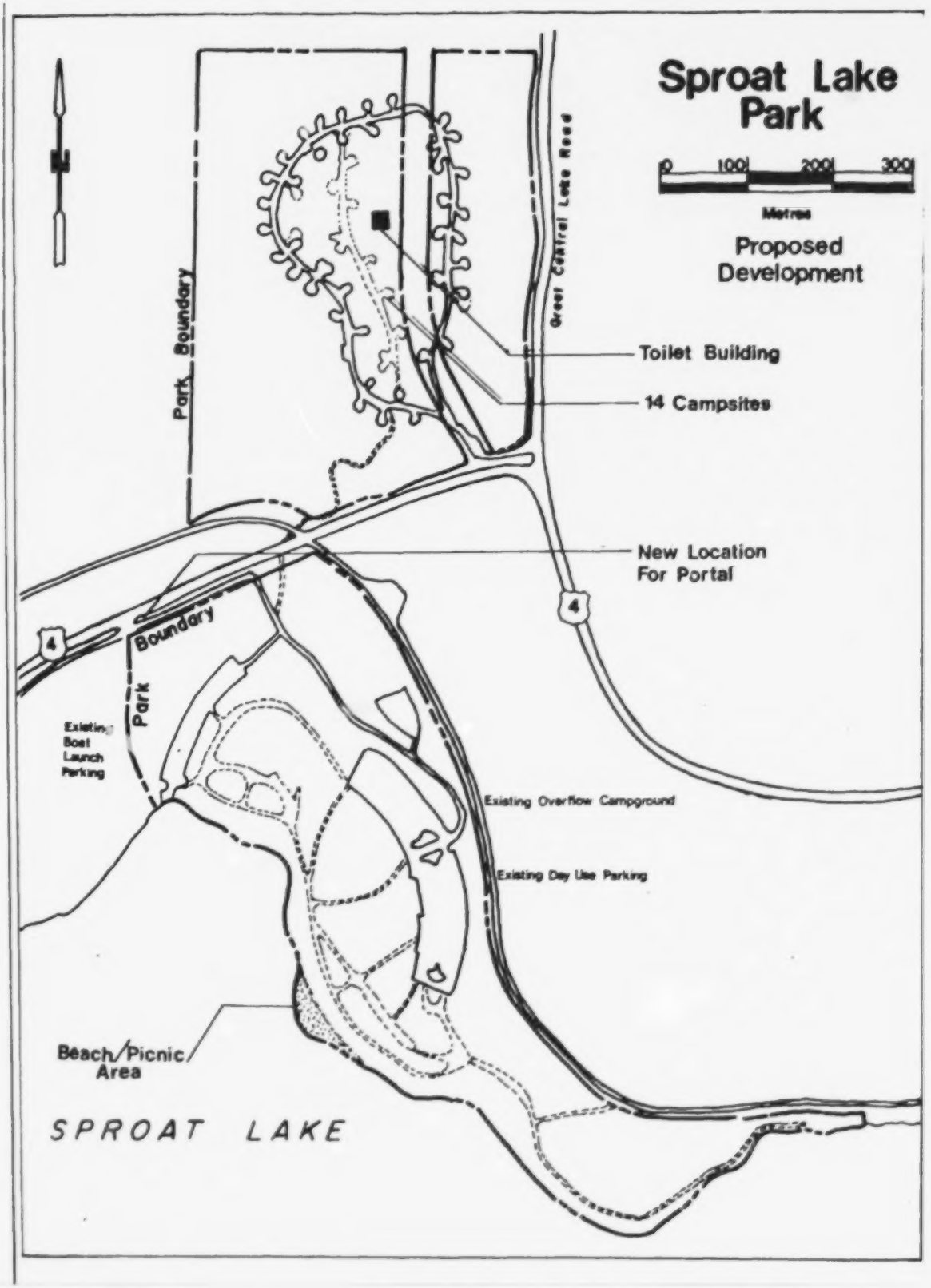
Standard information will be provided on individual park features and services emphasizing the lake orientation. In addition, Sproat Lake and Taylor Arm Parks will include information on regional recreation, community services and tourism opportunities.

6.2 Visitor Opportunities/Objectives

The table on the following page identifies the opportunities to be provided by each park, the objective of each opportunity, as well as outlining what needs to be done to carry out these objectives.

VISITOR OPPORTUNITIES /OBJECTIVES

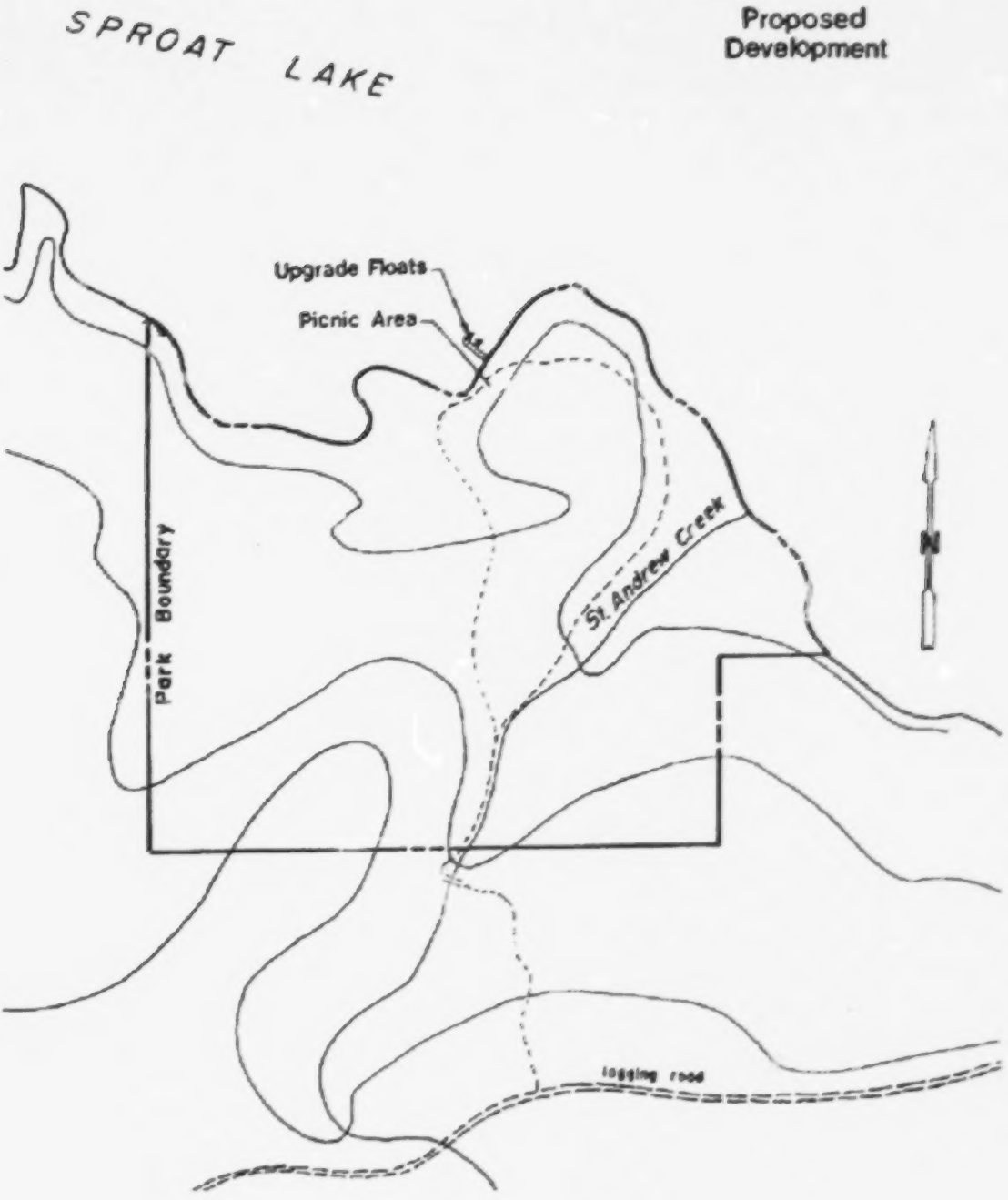
Park	Visitor Opportunity	Objective	Facilities/Serv
Sproat Lake	Picnicking	To increase quantity of opportunities	Expand beach frontage/prov
	Swimming	To improve the quality and safety of swimming opportunities	Remove submerged debris swimmers itch
	Playing	To provide space to play a variety of games on an informal basis, i.e. soccer, baseball, etc.	Acquire additional flat lan
	Easy Access Camping	To expand and improve easy access camping	Develop 10 additional camp construct a toilet building
	Hiking/Walking	To provide short duration hiking/walking opportunities for all levels of ability	Expand park boundaries anc
	Boating	To continue to provide for a variety of boating opportunities (canoes, sail and motor boats)	None required
	Fishing	To encourage the continued easy availability of fishing opportunities	Monitor fisheries managem
	Natural/Cultural Appreciation	Integrate the appreciation of the petroglyphs with the appreciation of the surrounding natural environment	Expand park boundaries, p guided interpretative trail
Fossli	Picnicking	To provide opportunities for boaters to picnic in a low use natural environment	Provide several picnic tabl
	Hiking/Walking	To diversify available things to do and ways to enjoy park resources	None required
	Boating	To provide easy boat access to encourage increased use	Upgrade float to accommod
	Swimming	To diversify park opportunities	Upgrade beach area, sunbat safety information
Taylor Arm	Picnicking	To provide lakeshore picnicking opportunities for destination and travel corridor visitors	Provide picnic tables, hand
	Boating	To facilitate small craft uses such as wind surfing and canoeing	Develop a car-top boat drop off
	Waterplay/Swimming	To encourage safe, enjoyable waterplay/swimming opportunities	Provide water safety inform
	Playing	To provide the opportunity for a diversity of games associated with picnicking	Develop a small sunny gra


Sproat Lake Park
0 100 200 300
Metres
Proposed Development
Park Boundary
Great Central Lake Road
Toilet Building
14 Campsites
New Location For Portal
4
4
Park Boundary
Existing Boat Launch Parking
Existing Overflow Campground
Existing Day Use Parking
Beach/Picnic Area
SPROAT LAKE

Fossli Park

0 100 200 300 m

Proposed Development



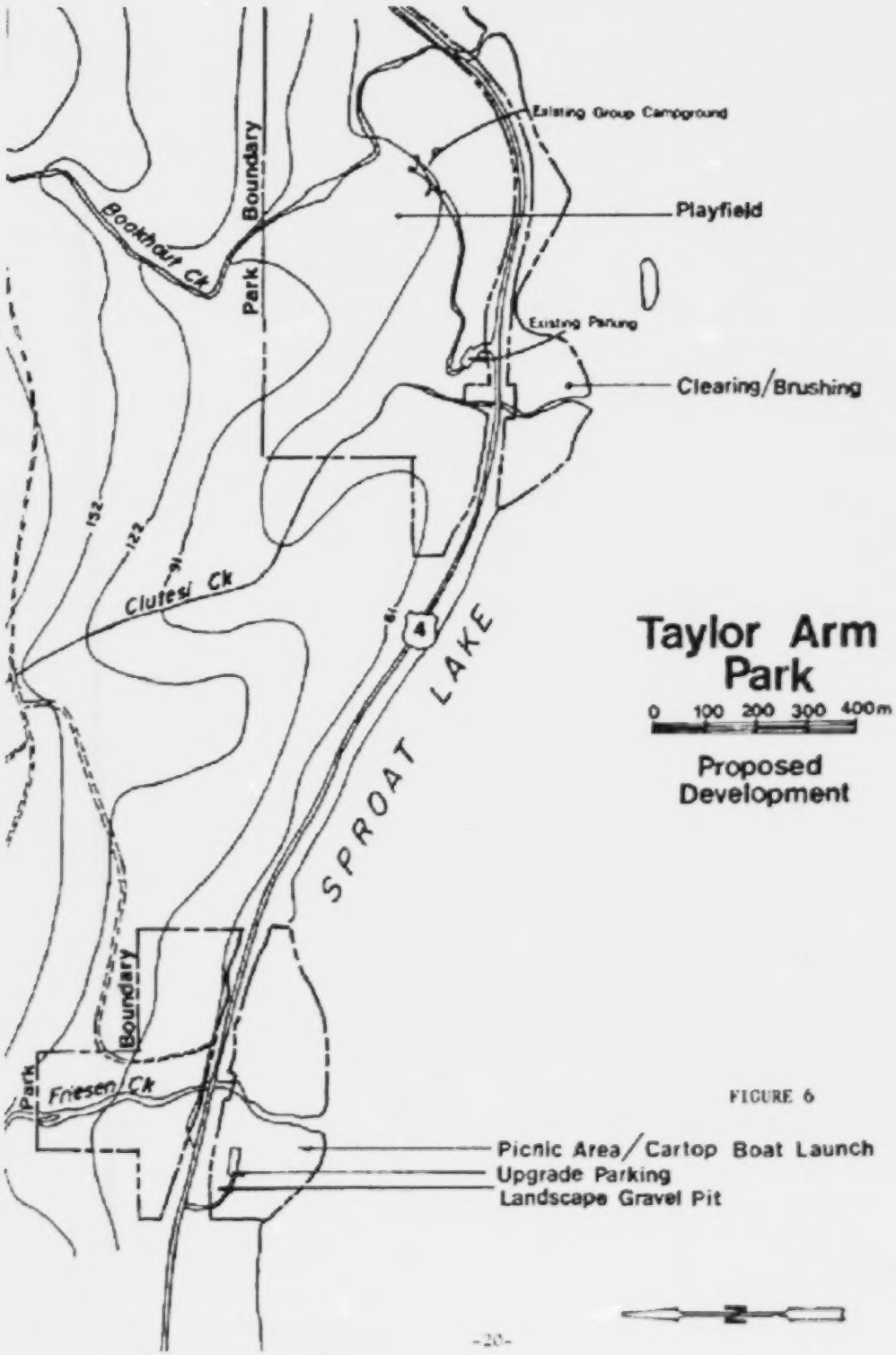

Existing Group Campground
Playfield
Existing Parking
Clearing/Brushing
Bookhout Ck
Park Boundary
132
122
91
61
Clutesi Ck
4
SPROAT LAKE
Taylor Arm Park
0 100 200 300 400m
Proposed Development
Park Boundary
Friesen Ck
Picnic Area/Cartop Boat Launch
Upgrade Parking
Landscape Gravel Pit
N

FIGURE 6

6.3 Management Services

a) Headquarters and Service Yards

The park headquarters and service yard for all three parks are located near the day use area at Sproat Lake Park.

b) Site and Facility Design Standards

All sites and facilities developed for public use will meet the design standards of the Ministry of Parks. Attention will be paid to consideration of safety, visual values and operational efficiency, while providing rustic, durable and cost efficient products.

c) Safety and Health

The safety and health of park visitors and staff are paramount concerns. Natural hazards easily accessible to the public will be appropriately posted, removed or minimized. There will be periodic safety inspections of all high use areas. All normal precautions will be taken regarding safety and health. Parks has no internal search and rescue capability, but will work closely with the Royal Canadian Mounted Police and the Provincial Emergency Program in the event of any search and rescue emergency in the park.

6.4 Promotion and Information Program

In view of the presence of high levels of existing use, it is unlikely that Sproat Lake or Taylor Arm would require any significant promotion other than what is available through the information strategy. On the other hand, the low use levels and restricted access of Fossli Park require promotion to increase awareness of the area and to attract park visitors. As the boat launch at Sproat Lake Park is one of the main accesses to Fossli Park, it is a strategic location for providing information. Consequently, an information shelter for Fossli Park will be installed at the boat launch in Sproat Lake Park and another at the float of Fossli Park. In addition, information on Fossli Park will be provided at Taylor Arm for canoeists and windsurfers.

To improve identification of Sproat Lake Park from the highway, moving the existing portal to a more visible location and providing information will be explored with the Ministry of Transportation and Highways.

All three parks will be promoted through local tourism outlets and park specific promotion campaigns.

7.0 PLAN IMPLEMENTATION

The proposals and recommendations of this plan are not of an urgent nature; consequently, regional priorities will dictate the timing and manner of implementation.

APPENDIX I

Background Report

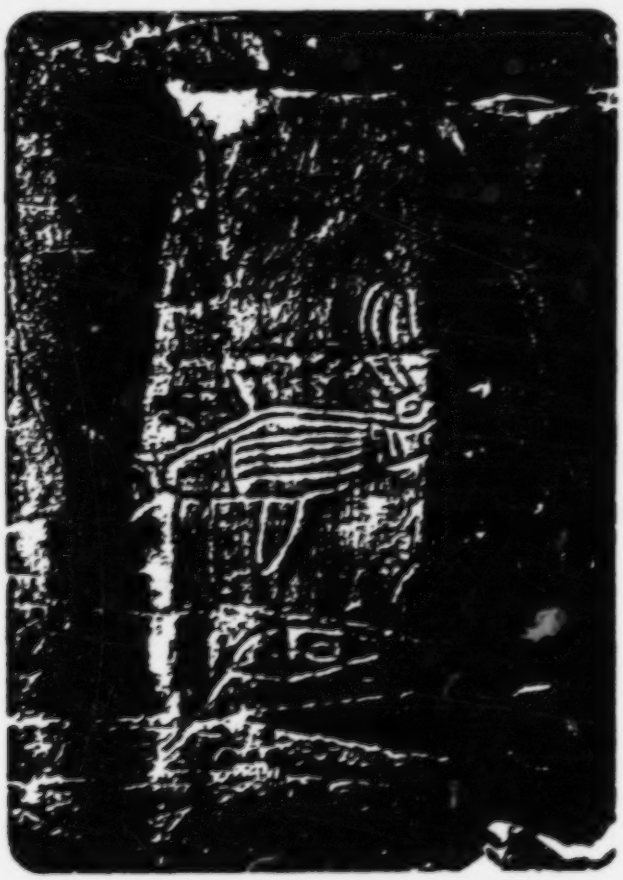
1.0 INTRODUCTION

The three park areas are situated on Sproat Lake approximately 15 kilometres west of Port Alberni. The largest park is Taylor Arm which consists of two areas about one kilometre apart and encompassing 79 hectares. Sproat Lake Park is eight kilometres east of Taylor Arm and encompasses 39 hectares, while Fossli Park located on the south shore, is about 59 hectares in size. Access is available through a two lane paved provincial highway, Route #4, named the Pacific Rim Highway. Taylor Arm and Sproat Lake are accessed in this way; however, Fossli Park is primarily accessible by boat. A major logging road along its southern boundary provides vehicle access to within a few hundred metres of the park boundary. Generally, all three areas are very similar in environment with relatively gently sloping terrain with a thick forest cover of mixed species and extensive useable lake frontage. Their designation occurred over a thirteen year period beginning with Sproat Lake in 1966, Fossli Park in 1974 and Taylor Arm in 1979.

Fossli Park was acquired through a donation from F. Armour and Hellen Jessop Ford. The property was named Fossli by a previous owner believed to be from Norway. Fossli is an area in Norway famous for the 200 metre high Vorinfossen Waterfall.

Taylor Arm and Sproat Lake are geographic names originating from Charles Taylor, the first settler to the Alberni Canal, and Gilbert Malcolm Sproat, who established the first sawmill in the area.

Prior to white men visiting the area, the Nootka Indians were the first human inhabitants. The Hopachisat Band of the Nootka Indians lived in the area; however, there is very little information available on their history associated with the Sproat Lake area or the petroglyphs at Sproat Lake Park.



Petroglyphs at Sproat Lake

2.0 NATURAL AND CULTURAL RESOURCES

2.1 Natural Resources

2.1.1 Physiography

The Sproat Lake area is a minor component within the Vancouver Island Mountains Regional Landscape which encompasses most of Vancouver Island. Formed from Pre-Pleistocene uplift and modified by extensive glaciation, this landscape has a wide variety of physiographic features from rounded mountain peaks and ridges to coastal features such as long fjords, large sandy beaches and a rugged coastline. Extensive forestry harvesting is widely evident with settlement areas concentrated in the flat coastal area.

Port Alberni is the closest large community to the three park areas. It is located in a flat valley area of the regional landscape known as the Alberni basin. Sproat Lake Park is at the periphery of this basin and has generally flatter terrain in its vicinity than the other two parks. Fossli and Taylor Arm Parks are large creek deltas that gradually slope to the lake. They are situated in a setting more characteristic of the regional landscape, surrounded by steep slopes and mountain ridges.

2.1.2 Bedrock/Surficial Geology

There are two main bedrock formations encompassing the park areas; Island Intrusions and the Karmutsen formation.

The Island Intrusion formation is made up of biotite-hornblende, granodiorite and quartz diorite. This can be seen in the extensive rock outcrops near Sproat Lake Park and Taylor Arm Park. Most of the area of these two parks is covered with a thick overburden layer of primarily marine deposits of silt, clay and stony clay.

The Karmutsen formation which extends over Fossli Park consists generally of a variety of rock, including pillow-basalt, pillow-breccia and massive basalt flows. There are extensive surficial ground moraine deposits in the form of till, sand and gravel that limit pin-pointing the exact location and occurrence of the Karmutsen formation rock types; however, some evidence of pillow-basalt can be seen at St. Andrew Creek.

2.1.3 Climate

The climate in the Sproat Lake area is typical of Central Vancouver Island with moderate to high precipitation and mild temperatures. Generally, summers are cool to warm and winters are mild. Port Alberni is the nearest weather recording station. Climatic records from 1941-1970 for this area indicate an average monthly summer temperature of 15°C, while in winter the average monthly temperature drops to about 3°C. Annual total precipitation is about 150 cm with 76 cm of snow annually at a elevation of 2.4 metres above sea level.

2.1.4 Soils

As a result of the above soil formation influencing factors of climate, geology and physiography, the soils of the park areas fall within the broad soil classification, Humo-Ferric Podzol. These soils are generally well to rapidly drained, dark reddish in colour, low ph values and moderate to high iron and aluminum levels. Five soil associations are recognized; Hawarth, Quinsam and Robertson over Taylor Arm Park, Alberni over Sproat Lake Park and Rossiter over Fossli Park. These soil associations are groups of soils about the same age derived from the same parent material and formed under similar climatic conditions. They are distinguished by a number of variables including drainage, texture and coarse fragment content.

2.1.5 Vegetation (Biogeoclimatic Zones)

Vegetation in British Columbia is classifed into a number of groups or zones based upon distinct patterns in predominant species; geology, soils, elevation and climate. The three park areas of Sproat Lake lie within two biogeoclimatic zones; the Coastal Douglas-fir and the Coastal Western Hemlock.

The Coastal Douglas-fir zone encompasses Sproat Lake and Fossli Parks. Douglas-fir (Pseudotsuga menziesii) is the dominant tree species with an understory of Salal (Gautheria shallon); however, there are several pockets of Western Red Cedar (Thuju plicata) with a Sword Fern (Polystichum munitum) understory. Shrub species in these parks include Salmon Berry (Rubus spectabilis), Waxberry (Symphoricarpos albus), Oregon Grape (Berberis nervosa), Broom (Cytisus scoparius), Wild Rose (Rosa nutkana) and Red Osier Dogwood

(Cornus stolonifera). At Sproat Lake, there are, in addition, several specimens of Pacific Dogwood (Cornus nutalli), a number of pockets of Lodgepole Pine (Pinus contorta latifolia) along the shoreline and several Sugar Maples (Acer saccharum) which line the main day use area.

The Coastal Western Hemlock zone encompasses both areas of Taylor Arm Park. Coastal Western Hemlock (Tsuga heterophylla) is the dominant tree species along with Western Red Cedar and an understory of Sword Fern, Vanilla Leaf (Achlys triphylla) and Bracken (Pteridium aquilinum pulsescens). Above the gravel deltas of the park in the drier slopes, Douglas-fir is dominant with a Salal and Oregon Grape understory. In this drier area, there are a few specimens of Pacific Dogwood and Arbutus (Arbutus menziesii).

2.1.6 Fish and Wildlife

The small size of the park prohibits extensive fish and wildlife resources. The main resident wildlife species include Red Squirrels, racoons and martens. A number of transient wildlife species frequent the area, including wolves, cougar, black bear and deer. Although Roosevelt Elk are somewhat rare in this area, there is evidence that their winter range includes the low valley slopes of the park areas.

There are many common bird species to see, such as Stellar's Jays and Varied Thrush, game birds such as Blue and Rough Grouse. Trumpeter Swans and Canada Geese use Sproat Lake during migration.

In terms of fish species, Sproat Lake has a major Sockeye Salmon run which passes through from the Alberni Inlet on its way to the Somass River; however, fishing for this species in the lake is prohibited. The main sport fishes are Rainbow Trout, Cutthroat Trout and Steelhead. The Cutthroat Trout in Sproat Lake are of significant size for this species with some as large as 50 centimetres in length.

2.1.7 Visual and Outdoor Recreation Features

Although the small size and low elevation of the park areas inherently limit the quality and quantity of visual and outdoor recreation features, there are a few features that provide significant attraction and recreation. Sproat Lake is the dominant outdoor recreation and visual feature for all of these parks. It creates an attractive visual focus as the surrounding vegetated slopes provide scale and contrast for the lake while recreationally, the lake has extensive fishing, boating and lakeside opportunities for swimming, sunbathing and picnicking. Sproat Lake Park has a significant sandy beach. Taylor Arm Park has two gravel deltas which are useable for swimming and sunbathing while the shoreline of Fossli Park is a mix of sand and gravel beaches; however, aquatic vegetation covers most of this area.

The only other significant feature is a small attractive waterfall on St. Andrew Creek at Fossli Park. St. Andrew Creek flows through a basalt channel with an elevation drop at one point of two to three metres.

2.1.8 Water

Although Sproat Lake is not included in any of the park areas, it is the most significant water resource and represents the main feature for each park. The lake is part of a large drainage system that also includes Great Central Lake, the Taylor River, Stamp River, Sproat River, Somass River and the Alberni Inlet. Throughout the area, there are a number of land uses influencing the drainage system; however, forestry and housing are the main factors. Besides the run-off effects of extensive logging, the paper mill in Port Alberni pumps substantial quantities of water from both Great Central Lake and Sproat Lake for manufacturing paper, while residents in the area use the lake water for home consumption.

Sproat Lake covers about 55,000 hectares and has a mean depth of 65 metres. Water levels can vary considerably, with extensive rainfall; however, it appears that the lake level fluctuates an average of about two metres each year.

Taylor River and Sproat River provide excellent flushing action to maintain the high standard of water quality, but on some occasions problems with nutrient loading have caused algae blooms. Household waste has been identified as part of the problem, as the soil conditions surrounding the lake are not generally conducive to easily effective septic systems. While treatment facilities are uneconomic, local authorities believe that higher design standards and proper operation of existing septic systems could improve conditions.

One other factor affecting the recreational use of Sproat Lake is swimmers' itch. The swimmers' itch snail (Cercariae) inhabits the waters of Sproat Lake and compromises swimming opportunities. At Sproat Lake Park where the problem is more severe, showers and explanatory signage in the day use areas have helped mitigate this problem.

2.2 Cultural Resources

The petroglyphs at Sproat Lake are the only significant cultural features in all three park areas. They consist of eight distinct petroglyphs etched in a four metre high vertical rock wall immediately adjacent to the lake. Several figures at the base of the wall are submerged below the water level but are still easily seen through the clear water.

Created by the Hopachisat Band of the Nootka Indians, the grooves of the figures are believed to have been made using a pointed stick to rub an abrasive material such as wet sand into the rock to wear down the surface in a line. Each figure depicts a mythical sea creature of local legend.

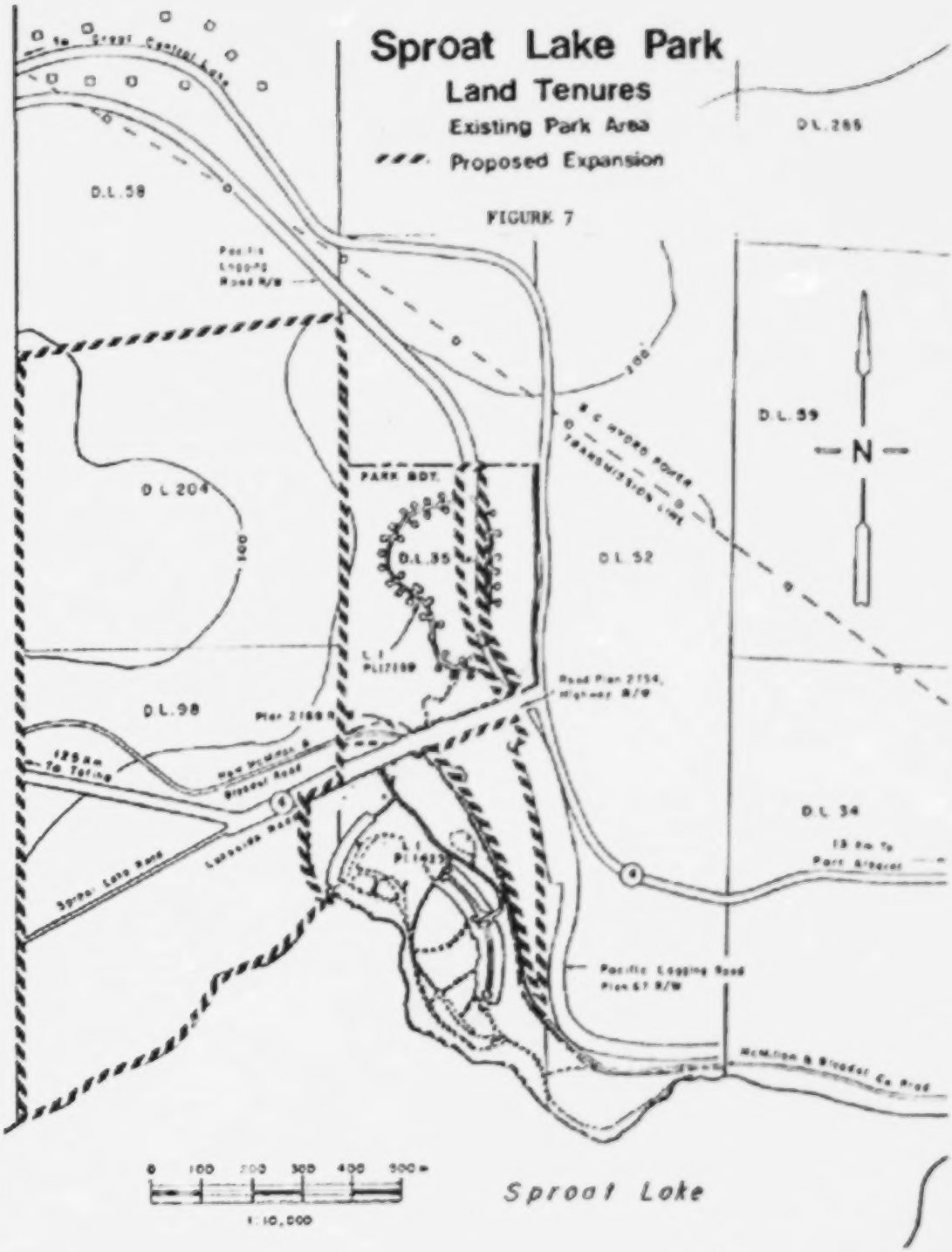
Legislatively, the petroglyphs are protected under the Historic Objects Preservation Act. A floating platform in front of the petroglyphs provides a good position for viewing while preventing direct contact with the rock wall.

2.3 Resource Analysis

The main natural resource for all three parks is Sproat Lake and the forested areas, while the Indian petroglyphs at Sproat Lake Park represent the most significant cultural resource. Each plays a role in addressing the overall conservation and recreation goals and programs of B.C. Parks.

3.0 TENURES, OCCUPANCY RIGHTS AND JURISDICTIONS

Lease and Permits	:	None
Fee Simple Inholdings	:	None
Forest Tenures	:	None
Water Rights	:	None
Rights-of-Way -		
Taylor Arm Park	:	Alberni-Tofino Highway #4, Plan 2750W
Sproat Lake Park	:	Pacific Logging Road, Plan 67RW
	:	Alberni-Tofino Highway #4, Plan 2734
	:	MacMillan and Bloedell Logging Road, Plan 2788RW
Mineral Rights	:	None
Trespasses	:	None
Statutory Jurisdictions	:	None


Sproat Lake Park
Land Tenures
Existing Park Area
Proposed Expansion
FIGURE 7
D.L. 38
D.L. 204
D.L. 98
D.L. 35
D.L. 52
D.L. 59
D.L. 285
D.L. 34
PARK BDY.
N
Sproat Lake
1:10,000

4.0 RECREATIONAL OPPORTUNITIES

The three park areas collectively provide a variety of recreational opportunities and facilities as described.

Fossli Park (Figure 8)

Fossli Park provides opportunities for hiking, swimming, boating, fishing and nature appreciation. A small float along the lake frontage is the focus for all the marine opportunities, while three kilometres of trails and a pit toilet are the full extent of the remaining facilities. Just outside the park boundary is a suspension footbridge built by the local community to improve access.

Taylor Arm (Figure 9)

The recreational opportunities at Taylor Arm Park are divided between two separate areas that make up the park. At the Bookhout Creek site, there is a group campsite with picnic tables, pit toilets and parking space for 15 vehicles. Besides camping, other recreational opportunities include nature appreciation and swimming.

The other site at Taylor Arm Park provides picnicking, beach and swimming opportunities on a gravel beach; however, with the exception of signage and a small 20 vehicle parking lot, there is no development.

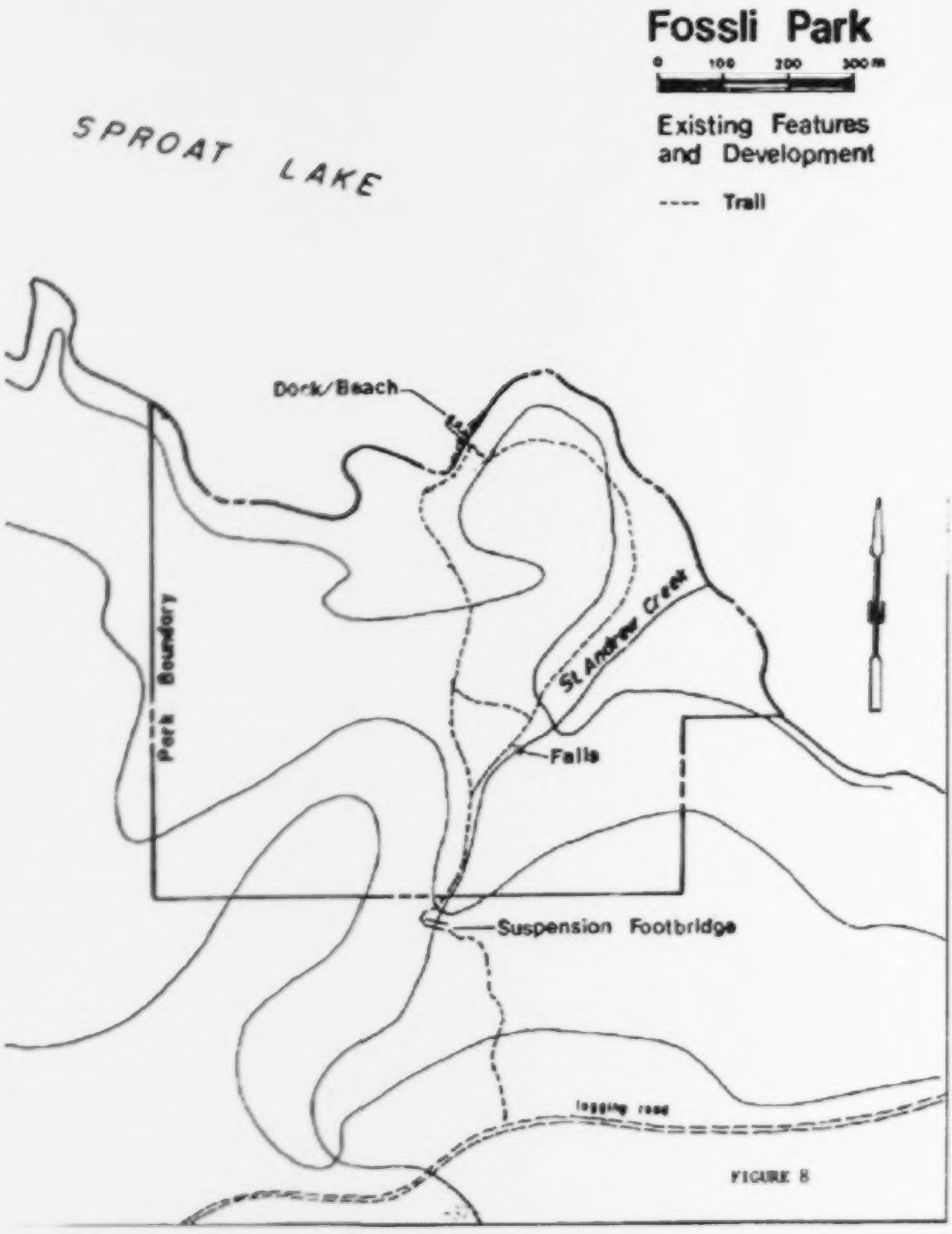

Fossli Park
0 100 200 300 m
Existing Features and Development
---- Trail
SPROAT LAKE
Dock/Beach
Park Boundary
St. Andrew Creek
Falls
Suspension Footbridge
logging road

FIGURE 8

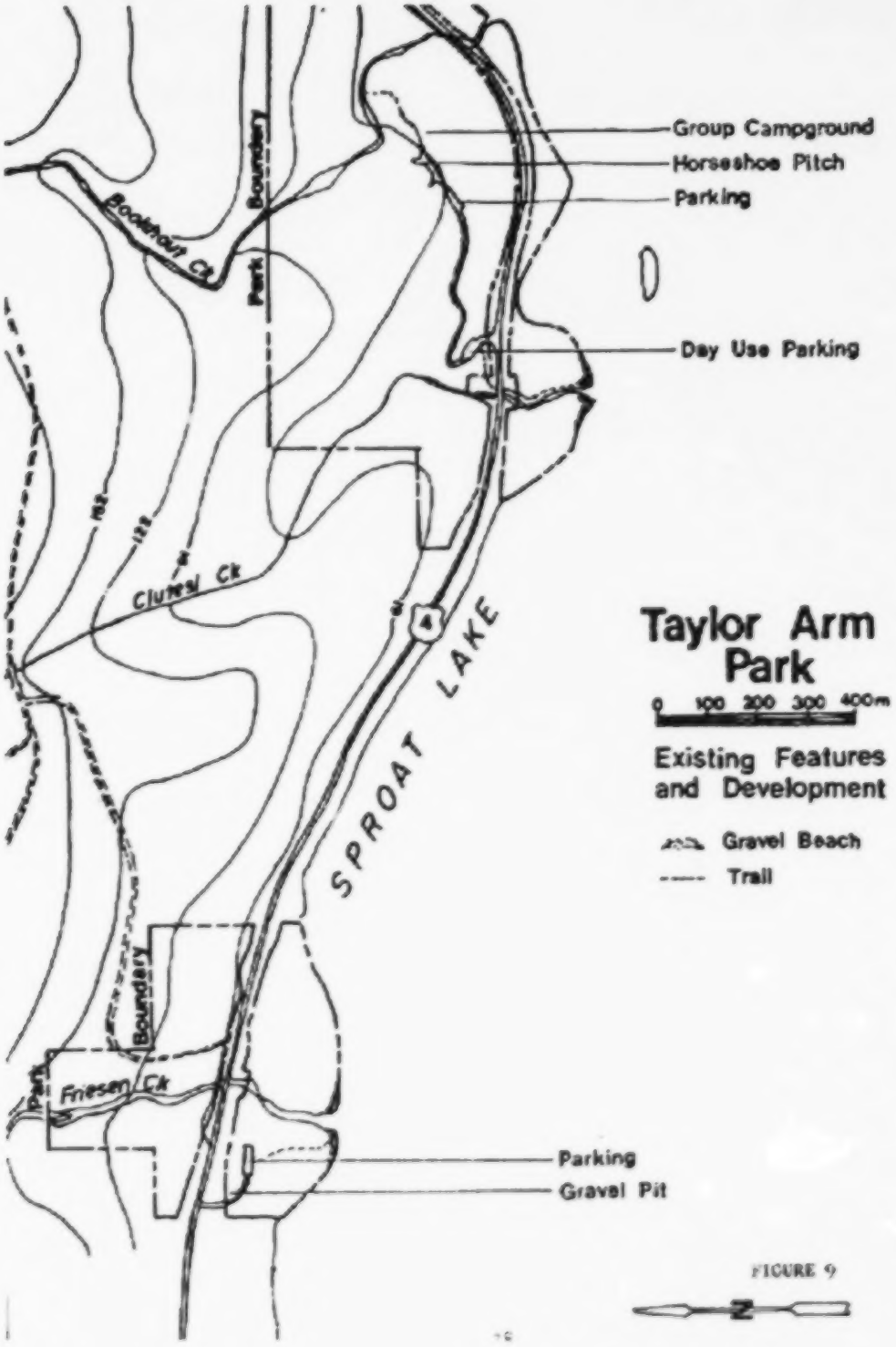

Group Campground
Horseshoe Pitch
Parking
Day Use Parking
Boothroyd Ck
Park Boundary
Clutesi Ck
SPROAT LAKE
Taylor Arm Park
0 100 200 300 400m
Existing Features and Development
Gravel Beach
Trail
Park Boundary
Friesen Ck
Parking
Gravel Pit

FIGURE 9

Sproat Lake Park (Figure 10)

Of all three parks areas, Sproat Lake Park has the greatest variety of recreational opportunities to offer. In addition to the picnicking, swimming and nature appreciation opportunities forementioned, there are 59 easy access campsites that offer vehicle and tent camping opportunities. A double boat launch with a 108 vehicle parking lot facilitates fishing, water skiing and boat touring opportunities, while a 100 vehicle parking lot services the day use area. An opportunity to appreciate some of the history associated with the local Indian culture is provided through the Indian petroglyphs.

The day use area at Sproat Lake Park

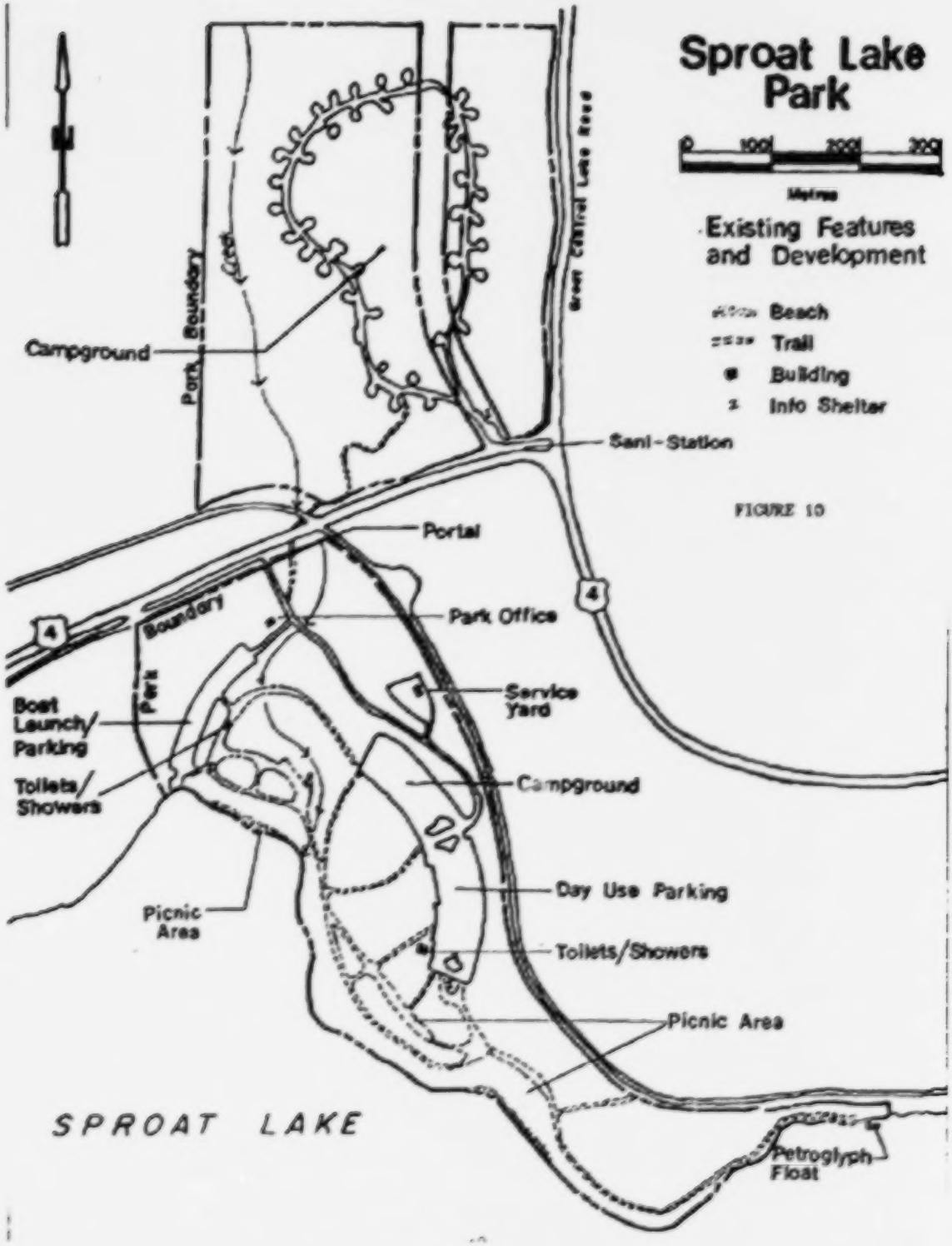

Sproat Lake Park
Existing Features and Development
Beach
Trail
Building
Info Shelter
Campground
Park Boundary
Sani-Station
Portal
Park Office
Service Yard
Boat Launch/ Parking
Toilets/ Showers
Campground
Day Use Parking
Picnic Area
Toilets/Showers
Picnic Area
SPROAT LAKE
Petroglyph Float
4

FIGURE 10

5.0 MARKET ANALYSIS

5.1 Existing Use Patterns

There are four distinct recreational use patterns: local resident day users, highway day users, highway overnight users and destination overnight use.

Local resident day use is almost exclusively on the weekends, while highway day use occurs throughout the week, but increases on the weekends. Of the overnight use patterns, highway overnight use accounts for about 30%, while destination overnight use accounts for the remaining 70%. A significant amount of overnight use is attributed to overflow from Pacific Rim National Park. (These figures are the result of a survey conducted only in Sproat Lake Park).

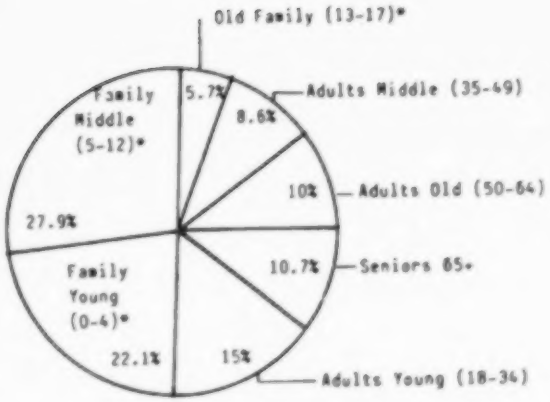
5.2 Park Attendance

In 1987, day use recreation amounted to 37,199 parties at Sproat Lake Park and 6,213 parties at Taylor Arm. Camping use at Sproat Lake was 5,748 parties and Taylor Arm group campsite recorded 444 parties. Attendance figures are not recorded for Fossli Park due to the low use levels. The Sproat Lake Park camping figures are particularly significant, as they indicate that this campground is the fourth most frequently used campground on Vancouver Island with an average July/August occupancy rate of over 95%.

5.3 Visitor Profile **

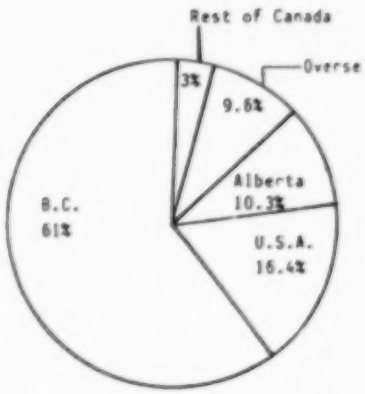
The majority of visitors were families with children under 12 years old, followed by young adults from 18-34 years old. In terms of origin, most visitors are B.C. residents, with visitors from the United States the second most frequent visitor. The international popularity of Pacific Rim National Park attracts many visitors into the area from outside the province and abroad, possibly accounting for the higher percentage of visitors from outside the country than the provincial average of 16%.

Types



* Ages of Children

Origin



** Information acquired at Sproat Lake Park

5.4 Demand/Needs

An indication of demand for existing recreational opportunities can be seen by examining the trend in park use attendance over time, while an examination of park surveys and observing park use over several years can provide information on the need for recreational opportunities and facilities not already provided for.

5.4.1 Park Use Trends (Appendix II)

Park use figures provide a general indication of demand for existing recreational opportunities (camping and day use) based upon the consumption of opportunities. Although park attendance is subject to many variables, such as climate, time constraints and costs, they do reflect trends in park use when examined over a period of several years. Study of the Sproat Lake attendance figures indicates an upward trend in the demand for day use and camping opportunities, while the use trend at Taylor Arm appears to show a slow decline in day use. The group camping attendance at Taylor Arm has fluctuated radically from a high of 1,261 parties in 1983 to a 1986 low of only 263 parties. In 1987, the 70% increase in attendance over the previous year may be an indication of the start of an upward trend.

Although the use trends in these parks are dissimilar, the Sproat Lake use trends reflect a 1987 province wide trend of substantial increases in day use levels with a modest increase in camping levels. The differences in the trend for these two parks may be attributed to differences in the history of their development. Taylor Arm is primitively developed in comparison to Sproat Lake and has had little facility improvement since it was established.

In the absence of any new opportunities being provided in the area, the downward trend in use is likely a result of visitor dissatisfaction with the continued low level of development.

5.4.2 Highway Use

Another measure of general demand is reflected in highway traffic volumes, as a significant amount of recreational use in these parks is directly related to highway travellers. The traffic volumes for the Pacific Rim Highway, Route #4 (Appendix III) showed a decline in the late 1970s followed by a slow but overall upward trend similar to that reflected in the use trends province wide and at Sproat Lake.

5.4.3 Surveys/Observations

While the park use and highway use trends indicate increases in demand for existing opportunities, they do not provide any information on the demand for new opportunities. Two surveys have been conducted in Sproat Lake Park to assess the public satisfaction of existing facilities, services and recreational opportunities and to discover what new opportunities should be provided. The results of the survey indicate that 75% of those surveyed were more than satisfied with existing conditions. The suggestions for new opportunities were facility oriented with most people wanting more showers, washroom facilities and improved roads.

Observations by park staff of visitor use patterns reveal a demand for field games, nature study and hiking.

6.0 ISSUES

6.1 **Fossli Park Issues**

In the 14 years since the park was established, no clear recreational use patterns have developed other than low levels of boat access day use. The main issue is what uses and form of development should be encouraged. Park features and resources are sufficient to accommodate a number of recreational opportunities, but at low use levels. The following outlines the implications of the more obvious options.

1. Maintain Status Quo

   Maintaining the current level of recreational use and development is a viable option in view of no distinct recreational patterns other than boat access day use.

2. Develop Day Use Opportunities

   Day use development in the form of picnicking, beach and walking facilities could be easily developed to encourage the enjoyment of park resources. Although the demand for day use appears to be mainly for easy access day use, boat access day use could become viable given a good promotion and awareness program.

3. Develop Camping Opportunities

Boat access camping opportunities are popular in some areas of the province where a system or series of campsites can be visited on a multi-day excursion. Unfortunately, Sproat Lake is too small and has limited opportunities for this type of use. Camping would only be viable if vehicle access was to be provided and in view of terrain constraints, providing vehicle access camping would be costly.

6.2 Taylor Arm Park Issues

Unlike Fossli Park, Taylor Arm Park has several recreational patterns that have evolved despite having only very primitive levels of development. The main issues of Taylor Arm are what uses should be encouraged and the types of facilities that should be provided. With substantial use already occurring at these sites, there are a number of options for providing recreational opportunities. The following outlines the implications of the more obvious alternatives.

1. Maintain Status Quo

   To maintain the current level of development would fail to recognize the needs of the many people who use these sites. While they will still be well used without any further development, refraining from action would not contribute to encouraging the development of tourism or will it encourage the long term use of this site, possibly creating congestion in other already heavily used areas such as Sproat Lake.

2. Develop Day Use Opportunities

   As a minimum standard, day use opportunities in the form of proper picnicking and parking should be provided to conform to provincial parks' standards and to limit damage caused by uncontrolled uses. This would encourage tourists and local residents to use the park on a return visit basis. The relatively low development costs of these sites clearly indicate a substantial benefit at a minimal cost.

3. Develop Camping Opportunities

While there is a good potential to provide a small easy access campground, there is little evidence of demand for such a substantial increase in the supply of camping facilities. Sproat Lake Park and the existing private campgrounds could absorb the present and future increased demand more economically. Provision of camping would provide only a small increase in convenience for those travelling the highway.

4. Commerical Day Use Opportunities

In view of the interest to develop commercial recreational opportunities at Sproat Lake and the absence of facilities at Taylor Arm Park, this site appears to be a candidate for providing commercial recreational opportunities, such as canoeing and windsurfing. The main benefit is the provision of opportunities at little capital expense to the province. While charging a fee for recreational opportunities may discourage some visitors, if other opportunities such as picnicking and swimming were also provided at no cost, visitors will have the choice of paying or not paying for the opportunities they are interested in.

6.3 Sproat Lake Park Issues

Sproat Lake Park is one of the smallest parks on Vancouver Island, yet it is one of the most heavily used. It is clear from park attendance and field observation that most park features and facilities are used to the fullest extent and that that peak capacities occur very often throughout the summer season. Some areas such as the picnic area in the Douglas-fir forest are not attractive to visitors and are under-utilized. The essential issue to be addressed at Sproat Lake Park is what should be done to mitigate the impact of heavy use levels on park opportunities while obtaining better use from under-utilized areas. Below are a few options that are being considered.

1. Maintain Status Quo

   Maintaining the existing situation over several years could adversely affect use, as park opportunties are increasingly compromised by too many visitors for too few opportunities.

2. Expand Day Use Facilities

   To be most effective, day use facility expansion should include an increase in the most popular activities, such as swimming, picnicking and beach activities combined with opportunities not already provided for, such as field games. Many of these changes can be easily accommodated; however, a facility for field games cannot be accommodated within the existing land base.

3. Expand Park Boundaries

The expansion of park boundaries would assist in helping disperse recreational use by providing more recreational opportunities as well as removing a private land encumbrance. Some natural features and opportunities not already provided could be acquired. In view of the continued increases in the general demand for recreation, an expansion of the park boundary will inevitably be required to meet future park demands.

PHOTOGRAPH NOT AVAILABLE

One of the areas proposed as an addition

4. Provide Commercial Day Use Opportunities

The private sector has shown an interest in providing commercial opportunities for windsurfing, canoes and paddle boats at Sproat Lake; however, the large number of existing boats and water aircraft using this section of the lake presents a safety and aesthetic problem. Other than this interest, there does not appear to be any other commercially viable opportunities.

APPENDIX II

Park Attendance (Parties) 1980 - 1987

		1980	1981	1982	1983	1984	1985	1986	1987
Sproat Lake Park	Day Use (party days)	23,472	33,940	33,266	27,256	29,359	33,667	32,412	37,199
	Camping (party nights)	4,375	5,063	4,235	4,402	4,521	4,864	4,661	5,748
Taylor Arm Park	Day Use (party days)	1,605	3,848	5,068	3,876	3,935	6,990	6,352	6,213
	Group Camping (party nights)	475	423	487	1,261	841	517	263	444

Note: Attendance is not recorded at Fossli Park

APPENDIX III

Highway Traffic Volume (Route #4) – 1976 - 1986

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Station #1		4,300	3,100		*	*	3,300	3,200	3,300	3,500
Station #2	1,100	1,200	1,100		*	*	*	1,300	1,500	1,400

Note: Station #1 is located 0.1 km west of Great Central Lake Road at Sproat Lake

Station #2 is located 18.0 km west of Great Central Lake Road at Sproat Lake

* No count obtained

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